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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/908,453	08/07/1997	GARY RUVKUN	08472/704002	9530
21559 7:	590 03/31/2005		EXAMINER	
CLARK & ELBING LLP 101 FEDERAL STREET			SHUKLA, RAM R	
BOSTON, MA 02110			ART UNIT	PAPER NUMBER
			1632	

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	08/908,453	RUVKUN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Ram R. Shukla	1632			
The MAILING DATE of this communication ap	1	correspondence address			
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.					
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed					
after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period. Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDON	m the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 14 October 2004.					
2a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4)⊠ Claim(s) <u>1-8,10-16 and 19-28</u> is/are pending in the application.					
4a) Of the above claim(s) <u>1-7,14 and 21-28</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>8, 10-13, 15, 16, 19, 20</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/	or election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a lis	t of the certified copies not receiv	red.			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summar Paper No(s)/Mail D				
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date		Patent Application (PTO-152)			
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office A	action Summary P	Part of Paper No./Mail Date 01052005			

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## **DETAILED ACTION**

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1. Applicants' petition (submitted 10/14/04) stating that the final rejection mailed July 8, 2003 has been in error since IDS submitted 8/13/02 was filed under 37 CFR 1.97(d) with statement under 37 CFR 1.97(d). Applicants' arguments are persuasive and therefore the finality of the office action mailed July 8, 2003 is hereby withdrawn and a new final action is issued.

- 2. Claims 1-7, 14, and 21-28 remain withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention. Election was made without traverse in Paper No. 15.
- 3. This application contains claims 1-7, 14, and 21-28 drawn to an invention nonelected with traverse in Paper No. 15. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
- 4. Claims 8, 10-13, 15, 16, and 19-20 are instantly under consideration in the instant application.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 6. Claims 8, 10 and 11 are rejected under 35 U.S.C. 102(a) as being anticipated by Swinburne J. (EMBL Accession No. Z66519, 27 October 1995).

Swinburne J teaches the nucleotide sequence of the C.elegans cosmid B0334 and discloses the amino acid sequence, which encompasses the amino acid sequence of SEQ ID NO 1. It is noted that the DNA encoding the amino acid sequence of SEQ ID NO 1 was isolated from this cosmid. The vector and host cell comprising the DNA are anticipated because both these are part of cloning and sequencing a DNA molecule.

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## Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 8, 10-13, 15, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swinburne J. (EMBL Accession No. Z66519, 27 October 1995) in view of Johnson et al (Genetica 91:65-77, 1993).

Swinburne J teaches the nucleotide sequence of the C.elegans cosmid B0334 and discloses the amino acid sequence, which encompasses the amino acid sequence of SEQ ID NO 1. Swinburne does not teach a method of making a protein from SEQ ID NO 1 or a method of screening for compounds that decrease AGE-1 gene.

Johnson et al teach C.elegans mutants, selective breeding, method of cloning genes and the significance of cloning the gene responsible for aging, age-1 and screening of animals for effect of different plasmids comprising DNA (see the entire document, for example, table 2, figure 4 etc.)

At the time of the invention, it would have been obvious for an artisan of skill to express the DNA of Swinburne in a cell and express the protein in a cell, isolate the protein and study its function or practice method of identifying compounds that decrease the expression of Age-1 by following the method of Johnson et al and routine cell culture methods. An artisan of skill would have been motivated to express Age-1 in a cell, isolated Age-1 protein and tested its activity because Swinburne identified putative functional domain. Additionally, an artisan would have been motivated to practice the screening methods for identifying compounds that decrease Age-1 activity because Johnson et al teaches that molecular cloning and characterization of Age-1 locus will provide significant insights into the molecular basis of senescence.

9. No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram R. Shukla whose telephone number is (571) 272-0735. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at (571) 272-0804. The fax phone number for TC 1600 is (571) 273-8300. Any inquiry of a general nature, formal matters or relating to the status of this application or proceeding should be directed to the Dianiece Jacobs whose telephone number is (571) 272-0532.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ram R. Shukla, Ph.D. Primary Examiner Art Unit 1632

RAM R. SHUKLA, PH.D. SUPERVISORY PATENT EXAMINER